

VERSION OF SPECIFICATION WITH
MARKINGS TO SHOW CHANGES MADE

Page 4, paragraph 4, line 19:

A substantially skinless cleaning roller of polyvinyl acetal having a uniform small pore size throughout the material in which over 90% of the pores of the material range from 7 - 40 microns in diameter with a mean flow pore diameter of about 20 microns and a mean flow pore pressure of 0.334 PSI. The flow rate through the material provide a dry flow ranging from [[25.0]] 95.0 L/min to 25.0 L/min and a wet flow of about 80.0 L/min to 6.5 L/min.

Page 8, paragraph 1, line 1:

to clean semiconductors ~~and that in the inventive~~ rollers had greater strength and greater durability.

In a specific embodiment, the devices are made using a suitable material that is firm, porous, elastic, and has certain abrasion resistiveness. The primary raw starting material for the device is air blown polyvinyl alcohol which is used to form a polyvinyl acetal porous elastic material with a uniform cell structure. The porous material varies in characteristic depending upon cleanliness, type of pore forming agent or process, type of aldehyde employed for the conversion of a polyvinyl alcohol to a polyvinyl acetal, and other factors. These factors also include the relative proportions of reactants, reaction temperature and time, and the general condition and starting materials in the manufacturing process.

MARKED UP VERSION OF CLAIMS WITH MARKING

TO SHOW CHANGES MADE

Claim 1. (Currently Amended) A cleaning device comprising a shaped body made of porous polyvinyl acetal material having a uniform pore size throughout the material with over 90% of the pores ranging from about 7 microns to about 40 microns in diameter size.

Claim 2. (Original) A cleaning device as claimed in claim 1 wherein said device is a roller having a smooth outer surface.

Claim 3. (Original) A cleaning device as claimed in claim 1 wherein said device is a pad.

Claim 4. (Original) A cleaning device as claimed in claim 1 wherein said device is a disk.

Claim 5. (Original) A cleaning device as claimed in claim 1 wherein said polyvinyl acetal material has an average pore size of about 20 microns.

Claim 6. (Currently Amended) A cleaning device as claimed in claim 1 wherein said material has about 95% of its pores with a diameter size below 40 microns.

Claim 7. (Currently Amended) A cleaning device comprising a body made of porous polyvinyl acetal material, said polyvinyl acetal material having a bubble point pressure of about 0.92 PSI.

Claim 8. (Original) A cleaning device as claimed in claim 2 wherein said roller has an outside diameter of about 60mm and an inside diameter of about 30mm with a thickness of about 15mm.

Claim 9. (Original) A cleaning device as claimed in claim 1 wherein said material has a mean flow pore pressure of about 0.33 PSI.

Claim 10 (Currently Amended) A semiconductor cleaning device comprising a body made of porous polyvinyl acetal material with a cylindrical roller shape and a smooth outer surface,

said material having [[a]] uniform gaseous formed pore sizes throughout with at least 90% of the pores ranging from about 7 microns to about 40 microns in diameter size with a fluid flow through rate which does not distort the roller during the cleaning process when fluid is passed through it to clean the same.

Claim 11. (Original) A semiconductor cleaning device as claimed in claim 10 wherein said polyvinyl acetal material has an average pore size of about 20 microns.

Claim 12. (Currently Amended) A semiconductor cleaning device as claimed in claim 10 wherein said material has 95% of its pores with a diameter size below 40 microns.

Claim 13. (Currently Amended) A semiconductor cleaning device comprising a body made of porous polyvinyl acetal material with gas formed pores and having at least 95% of its pores with a diameter size under 40 microns.

Claim 14. (Original) A semiconductor cleaning device as claimed in claim 10 wherein said roller is substantially skinless.

Claim 15. (Original) A semiconductor cleaning device as claimed in claim 10 wherein said material has a mean flow pore pressure of about 0.33 PSI.

Claim 16. (Currently Amended) A semiconductor cleaning device comprising a body made of porous polyvinyl acetal material having a uniform pore size throughout the material with at least 95% of the pores being less than 40 microns in diameter size, said material having a mean flow pore diameter size of about 20 microns.

Claim 17. (Original) A semiconductor cleaning device as claimed in claim 16 wherein said material has a mean flow pressure of about 0.33PSI.

Claim 18. (Currently Amended) A semiconductor cleaning device comprising a substantially cylindrical roller body made of polyvinyl acetal with a smooth outer surface and uniform

material porosity having a mean flow pore pressure ranging from about 0.30 PSI to about 0.40 PSI with 90% of its pores ranging from 7 to 40 microns in size and wet flow rate using water as a medium ranging from about [[9.0]] 7.0 L/min to [[20.0]] 80.0 L/min, said pores forming substantially empty cavities.

Claim 19. A semiconductor cleaning device as claimed in claim 18 wherein cleaning solvent flow through said roller ranges from 120 - 180 ml/minute.

Claim 20. (New) A semiconductor cleaning device comprising a substantially cylindrical roller body made of polyvinyl acetal with a smooth outer surface and uniform material porosity having a mean flow pore pressure of about 0.30 PSI with 90% of its pores ranging from 7 to 40 microns in size and a dry flow rate ranging from about 25.0 L/min to 95.0 L/min, said pores forming substantially empty cavities.

Claim 21. (New) A semiconductor cleaning device as claimed in claim 18 wherein said roller body polyvinyl acetal material has less than 0.1 ppm formaldehyde.

Claim 22. (New) A cleaning device as claimed in claim 1 wherein said device is a roller.